

CLAIMS

What is claimed is:

- 1 A method for automatically configuring devices in a network, comprising:
 - 5 (a) associating preconfigured policy settings with physical locations in the network;
 - (b) automatically detecting when a network device is plugged into the network and determining a location of the device in the network; and
 - 10 (c) automatically configuring the device based on the policy settings associated with the corresponding location.
- 2 The method of claim 1 wherein step (a) further includes the step of: displaying a configuration screen that allows the user to create different policy settings that specify what configuration actions are to be taken.
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- 3 The method of claim 2 wherein step (a) further includes the step of: saving the policy settings in a database.
- 20 4 The method of claim 1 wherein step (b) further includes the step of: detecting and locating the network device by transmitting SNMP queries from a router to the switches that traverse the network.

5 The method of claim 4 wherein step (b) further includes the step of:
determining which port on the network the device is plugged into.

6 The method of claim 5 wherein step (b) further includes the step of: detecting
5 any combination of newly added devices including routers, switches, computers,
and server blades.

7 The method of claim 6 wherein step (b) further includes the step of: detecting
processor blades and switches added to existing server blades.

10 8 The method of claim 1 wherein step (c) further includes the step of: retrieving
from a database the policy setting associated with the port location of the new
device.

15 9 A computer-readable medium containing program instructions for //
automatically configuring devices in a network, the program instructions for:
20 (a) associating preconfigured policy settings with physical locations in
the network;
(b) automatically detecting when a network device is plugged into the
network and determining a location of the device in the network;
and
(c) automatically configuring the device based on the policy settings
associated with the corresponding location.

10 The computer-readable medium of claim 9 wherein instruction (a) further includes the instruction of: displaying a configuration screen that allows the user to create different policy settings that specify what configuration actions are to be taken.

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11 The computer-readable medium of claim 10 wherein instruction (a) further includes the instruction of: saving the policy settings in a database.

10 12 The computer-readable medium of claim 11 wherein instruction (b) further includes the instruction of: detecting and locating the network device by transmitting SNMP queries from a router to the switches that traverse the network.

15 13 The computer-readable medium of claim 12 wherein instruction (b) further includes the instruction of: determining which port on the network the device is plugged into.

20 14 The computer-readable medium of claim 13 wherein instruction (b) further includes the instruction of: detecting any combination of newly added devices including routers, switches, computers, and server blades.

15 15 The computer-readable medium of claim 14 wherein instruction (b) further includes the instruction of: detecting processor blades and switches added to

existing server blades.

16 The computer-readable medium of claim 9 wherein instruction (c) further
includes the instruction of: retrieving from a database the policy setting
5 associated with the port location of the new device.

17 An automatic network configuration system, comprising: ✓
a network;
a plurality of network devices connected to the network, including routers,
10 switches, and computers; and
a network management application executing on one of the devices for,
allowing a user to establish and associate policy settings with
physical locations in the network,
automatically detecting when a device is plugged into the network
15 and determining a location of the device in the network, and
automatically configuring the device based on the policy settings
associated with the corresponding location.

18 The system of claim 17 wherein the network management application
20 displays a configuration screen that allows the user to create different policy
settings that specifies what configuration actions are to be taken.

19 The system of claim 18 wherein the network management application saves

the policy settings in a database.

- 20 The system of claim 19 wherein the network management application detects and locates the network device by transmitting SNMP queries from a router to
5 the switches that traverse the network.
- 21 The system of claim 20 wherein the network management application determines which port on the network the device is plugged into.
- 10 22 The system of claim 21 wherein the network management application detects any combination of newly added devices including routers, switches, computers, and server blades.
- 15 23 The system of claim 22 wherein the network management application further detects processor blades and switches added to existing server blades.
- 24 The system of claim 17 wherein the network management application retrieves the policy setting associated with the port location of the new device from a database.

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